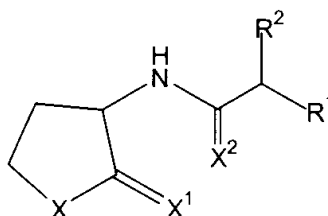


Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

- 1 1. (Currently Amended) A compound having the structure:



(I)

wherein,

R¹ is a member selected from —H, —OH, and (=O);

R² is a member selected from reactive functional groups, alkyl groups

terminally substituted with a reactive functional group and internally

substituted alkyl groups terminally substituted with a reactive

functional group wherein said alkyl groups terminally substituted with

a reactive functional group and said internally substituted alkyl groups

terminally substituted with a reactive functional group are substituted

with a reactive functional group which is a member selected from —

OR³, —NHR⁴, —COR⁵, —SH and —CH₂X³ wherein,

—OR³ is a member selected from hydroxy, alkyl sulfonate and
aryl sulfonate groups;

R⁴ is H;

R⁵ is a member selected from H, X³ and —OR⁶, wherein

R⁶ is a member selected from alkyl, substituted alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, heterocyclyl and substituted heterocyclyl groups; and

X³ is a halogen;

X is ~~a member selected from —O—, —S— and —NH—~~; and

X¹ and X² are members independently selected from O and S.

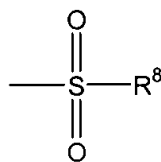
2. (Original) The compound according to claim 1, wherein R² is an internally substituted alkyl group terminally substituted with a reactive functional group.

3. (Original) The compound according to claim 2, wherein the alkyl group is internally substituted with a functional group that is a member selected from —OH, (=O) and combinations thereof.

4. (Canceled)

5. (Original) The compound according to claim 1, wherein the compound is a single stereoisomer.

6. (Currently Amended) The compound according to claim 4 1, wherein R³ is



(V)

wherein,

R⁸ is a member selected from alkyl, substituted alkyl, aryl and substituted aryl groups.

7. (Original) The compound according to claim 1, wherein the alkyl and the internally substituted alkyl groups are members selected from C₁-C₂₀ saturated straight-chain, C₁-C₂₀ saturated branched-chain, C₁-C₂₀ unsaturated straight-chain, C₁-C₂₀ unsaturated branched-chain alkyl and internally substituted alkyl groups.

1 8. (Original) The compound according to claim 7, wherein the alkyl and
2 internally substituted alkyl groups are members selected from C₅-C₁₀ saturated straight-chain,
3 C₅-C₁₀ saturated branched-chain, C₅-C₁₀ unsaturated straight-chain, C₅-C₁₀ unsaturated
4 branched-chain alkyl and internally substituted alkyl groups.

1 9. (Original) A compound according to claim 1, wherein R² has the
2 structure:

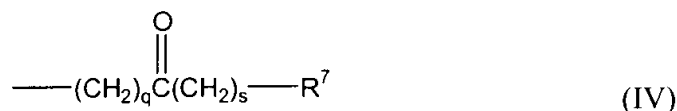


3
4 wherein,

5 R⁷ a reactive functional group; and
6 n is a number from 1 to 20, inclusive.

1 10. (Original) The compound according to claim 9, wherein n is a number
2 from 2 to 9, inclusive.

1 11. (Original) A compound according to claim 1, wherein R² has the
2 structure:



3
4 wherein,

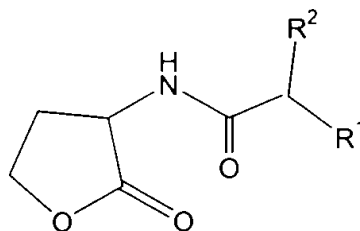
5 R⁷ is a reactive functional group; and
6 q and s are numbers independently selected from 1 to 20, inclusive.

1 12. (Original) The compound according to claim 11, wherein s is a number
2 from 2 to 9, inclusive.

1 13. (Canceled)

1 14. (Canceled)

1 15. (Original) A compound having the structure:



(II)

wherein,

R¹ is a member selected from H, OH, and (=O); and

R² is a member selected from H, reactive functional groups, alkyl groups terminally substituted with a reactive functional group and internally substituted alkyl groups terminally substituted with a reactive functional group, with the proviso that when R² is —OH, R¹ is a member selected from OH, and (=O).

16. (Original) The compound according to claim 15, wherein the reactive functional group is a member selected from —OR³, —NHR⁴, —COR⁵, SH and CH₂X³

wherein,

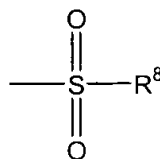
—OR³ is a member selected from hydroxy, and a species such that —OR³ is a leaving group;

R⁴ is a member selected from H, C₁-C₆ alkyl, C₁-C₆ substituted alkyl, aryl and substituted aryl groups;

R⁵ is a member selected from H, halogen and —OR⁶, wherein R⁶ is species such that —OR⁶ is a leaving group; and

X³ is a halogen.

17. (Original) The compound according to claim 16, wherein R³ is



(V)

wherein,

4 R⁸ is a member selected from alkyl, substituted alkyl, aryl and substituted aryl
5 groups.

1 **18.** (Original) The compound according to claim 16, wherein R⁶ is a
2 member selected from alkyl, substituted alkyl, aryl, substituted aryl, heteroaryl, substituted
3 heteroaryl, heterocyclyl and substituted heterocyclyl groups.

1 **19.** (Original) The compound according to claim 15, wherein the alkyl and
2 the internally substituted alkyl groups are members selected from C₁-C₂₀ saturated straight-
3 chain, C₁-C₂₀ saturated branched-chain, C₁-C₂₀ unsaturated straight-chain, C₁-C₂₀ unsaturated
4 branched-chain alkyl and internally substituted alkyl groups.

1 **20.** (Original) The compound according to claim 19, wherein the alkyl and
2 internally substituted alkyl groups are members selected from C₅-C₁₀ saturated straight-chain,
3 C₅-C₁₀ saturated branched-chain, C₅-C₁₀ unsaturated straight-chain, C₅-C₁₀ unsaturated
4 branched-chain alkyl and internally substituted alkyl groups.

1 **21.** (Original) A compound according to claim 15, wherein R² has the
2 structure:



4 wherein,

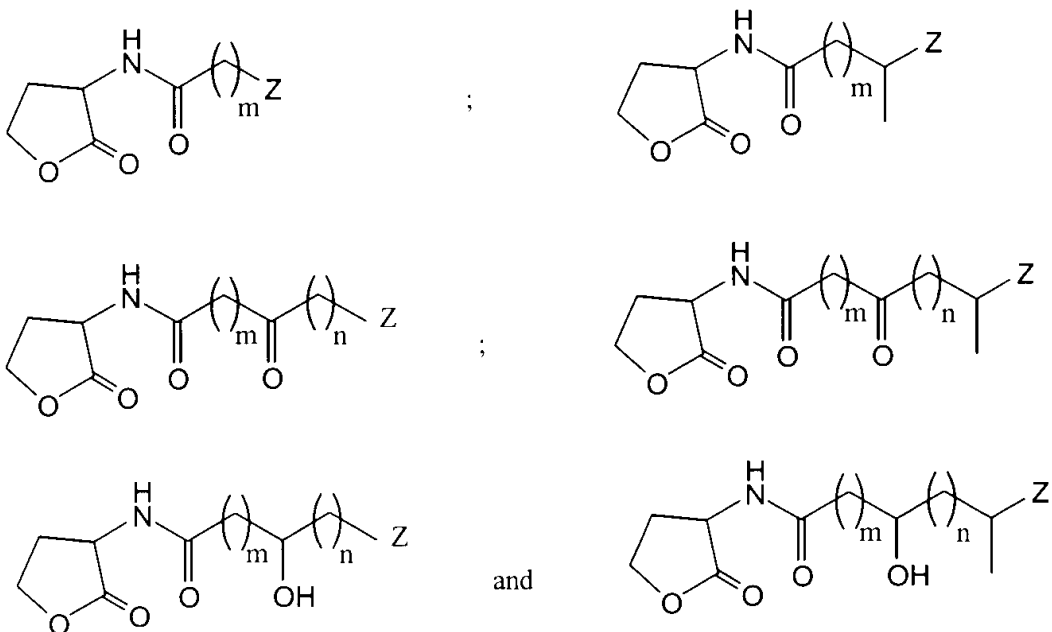
5 R⁷ is a reactive functional group; and
6 n is a number from 1 to 20, inclusive.

1 **22.** (Original) The compound according to claim 21, wherein n is a
2 number from 2 to 9, inclusive.

1 **23.** (Original) The compound according to claim 15, wherein R² is a
2 member selected from the group consisting of—COOH, —OH, —NH₂, and —SH.

1 **24.** The compound according to claim 21, wherein R⁷ is a member selected
2 from the group consisting of—COOH, —OH, —NH₂, and —SH.

1 **25.** (Original) A compound having a structure that is a member selected
2 from:



wherein,

m is a number selected from 1 to 20, inclusive;

n is a number from 0 to 20, inclusive; and

Z is a reactive functional group.

1 **26.** (Original) The compound according to claim 25, wherein m and n are
2 numbers independently selected from 2 to 9, inclusive.

1 **27.** (Original) The compound according to claim 25, wherein Z is a member
2 selected from —NH₂, —COOH, —SH, and —OH.

1 28. - 108. (Canceled)